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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 5211.14-2021

**General methods of test for pigments and extenders - Part 14:
Determination of residue on sieve - Mechanical flushing
procedure**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is part 14 of GB/T 5211. GB/T 5211 has released the following parts.

- Cold extraction method for determination of water-soluble pigments;
- Pigment water soluble matter determination thermal extraction method;
- General test methods for pigments and extenders. Part 3. Determination of volatiles at 105°C;
- Determination of pigment filling volume and apparent density;
- Pigment resistance test method;
- General test methods for pigments and extender pigments Part 6. Determination of pH value of aqueous suspension;
- Determination of pigment water-soluble sulfate, chloride and nitrate;
- Determination of electrical resistivity of pigment water extract;
- Determination of pH of pigment water extract;
- General test methods for pigments and extender pigments. Part 14. Determination of sieve residues. Mechanical flushing method;

--- General test methods for pigments and extender pigments Part 15.Determination of oil absorption;

---Comparison of the decoloring power of white pigments;

---Comparison of white pigment contrast ratio (hiding power);

--- General test methods for pigments and extender pigments. Part 18.Determination of residue on sieve water method (manual operation);

--- Visual comparison method for determination of relative tinting strength and diluted color of colored pigments;

---Comparative chromaticity method for the colors of white, black and colored pigments in the natural color system.

This document replaces GB/T 5211.14-1988 "Mechanical Flushing Method for the Determination of Pigment Sieve Residues", and is consistent with GB/T 5211.14-1988

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

---The normative reference document "GB/T 6005" was added, and "GB 9285" was changed to its revised version "GB/T 3186" (see Chapter 2, 1988

Chapter 2 of the Year Edition);

---Changed terms and definitions (see 3.1, Chapter 3 of the 1988 edition);

--- Deleted the content about pressurized tap water injection (see 5.1 in the 1988 edition);

---The material and size requirements of the container have been added (see 6.1.2); the water flow requirements have been changed (see 6.1.3, 6.1.2 of the 1988 edition),

The content of the test sieve requirements (see 6.1.4, 6.1.3 of the 1988 edition), the description and requirements of the accuracy of the balance (see 6.3, the 1988 edition of 6.1.3)

6.3);

---Changed the preparation method of the dispersion (see 8.3, 7.2 of the 1988 edition); added the judgment that the fine particles almost completely pass the test sieve

The method and the requirements for recording the corresponding time (see 8.4.1); added that if the sieve residue contains foreign matter, its storage should be recorded.

In and nature of the provisions (see 8.5);

---Changed the provisions of test data processing (see Chapter 9, Chapter 8 of the 1988 edition);

---Change the content of the test report (see Chapter 10, Chapter 9 of the 1988 edition).

This document uses the redrafting method to amend and adopt ISO 787-18.1983 ``General Test Methods for Pigments and Extender Pigments Part 18.Sieve

Determination of residue by mechanical flushing method.

Compared with ISO 787-18.1983, this document is different in structure. Appendix A lists the differences between this document and ISO 787-18.1983.

A list of chapter number comparisons.

Compared with ISO 787-18.1983, this document has technical differences.

The vertical single line (|) of the position is marked, and the corresponding technical differences and their reasons are listed in Appendix B.

The following editorial changes have been made to this document.

---Changed the file name, in order to be consistent with the existing standard numbering method, the file name was changed to "Pigment and Extender Pigment General Test Method

Method Part 14.Determination of Sieve Residues Mechanical Flushing Method.

Introduction

GB/T 5211 is a series of standards for general test methods for pigments and extender pigments. Due to historical reasons, the names of some of the standards formulated earlier

The unified guiding element "General Test Methods for Pigments and Extender Pigments" is not used. In addition, there are a few common test methods for pigments and extender pigments.

The independent number of the standard is not included in the various parts of the national standard GB/T 5211.It will be gradually processed in recent years and in the future formulation or revision work.

Smoothly, standardize the format of the standard number and standard name, and improve the standard system. GB/T 5211 "General Test Methods for Pigments and Extender Pigments"

The correspondence between the various parts to be formulated or revised and the current standards are shown in Table 1.

Table 1 Correspondence between each part of GB/T 5211 to be formulated or revised and the current standard

Number of issued document

GB/T 5211.1-2003

Determination of water-soluble pigments by cold extraction

How to take

GB/T 5211.1

General test methods for pigments and extender pigments Part 1

Part. Determination of water-soluble matter by cold extraction method

GB/T 5211.2-2003

Determination of water-soluble pigments by hot extraction

How to take

GB/T 5211.2

General test methods for pigments and extender pigments No. 2

Part. Determination of Water-soluble Matter Hot Extraction Method

GB/T 5211.3-2020

General test of pigments and extender pigments

Method Part 3. Wave at 105 degrees C

Hair determination

GB/T 5211.3

General test methods for pigments and extender pigments No. 3

Part. Determination of Volatile Matter at 105 degrees C

GB/T 5211.4-1985

Pigment filling volume and apparent density

Determination of

GB/T 5211.4

General test methods for pigments and extender pigments No. 4

Part. Determination of Filling Volume and Apparent Density

GB/T 5211.5-2008 Determination of pigment resistance GB/T 5211.5

General Test Methods for Pigments and Extender Pigments No. 5

Part. Tolerance Test